W

	Application No.	Applicant(s)
Notice of Allowability	10/812,084	MORROW ET AL.
	Examiner	Art Unit
	Wayne Langel	1754
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS
1. X This communication is responsive to the amendment of 3-1	<u>16-06</u> .	
2. X The allowed claim(s) is/are <u>1-8</u> .		
3. ☐ Acknowledgment is made of a claim for foreign priority un  a) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have  2. ☐ Certified copies of the priority documents have  3. ☐ Copies of the certified copies of the priority documents have  3. ☐ Copies of the certified copies of the priority documents have  3. ☐ Copies of the certified copies of the priority documents have  3. ☐ Copies of the certified copies of the priority documents have  3. ☐ Copies of the certified copies of the priority documents have  4. ☐ Applicant has THREE MONTHS FROM THE "MAILING DATE" on the delow. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submited in INFORMAL PATENT APPLICATION (PTO-152) which give submited in Including changes required by the Notice of Draftspers  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the deposate of the priority document regarding REQUIREMENT is attached Examiner's comment reg	been received.  been received in Application No cuments have been received in this in of this communication to file a reply of this application.  Sitted. Note the attached EXAMINER' as reason(s) why the oath or declarate to be submitted.  on's Patent Drawing Review (PTO-4) as Amendment / Comment or in the Office of BIOLOGICAL MATERIAL in sit of BIOLOGICAL MATERIAL in	national stage application from the complying with the requirements  S AMENDMENT or NOTICE OF tion is deficient.  948) attached  office action of the back) of the complying in the front (not the back) of the complying in the submitted. Note the
		÷
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☑ Interview Summary Paper No./Mail Dat 8), 7. ☑ Examiner's Amendr	e <u>4-24-06</u> .

Application/Control Number: 10/812,084

Art Unit: 1754

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Rosenblum on April 24, 2006

In claim 1, line 3, "hydrogen" (second occurrence) has been changed to -- carbon dioxide - -

In claim 2, last line "to" (second occurrence) has been deleted.

The following is an examiner's statement of reasons for allowance: Thomas (US 4,183,369) discloses a method for transmitting hydrogen gas from one point to another wherein the hydrogen gas is first purified to remove deleterious oxygen, carbon dioxide and any other contaminants. The gas may be compressed to raise the pressure to a preselected level, and the pressurized hydrogen gas is introduced into the inlet of a pipeline which is at least partially filled with activated metallic hydride wherein at least a portion of the hydrogen gas is absorbed by the metallic hydrides and is transported by migration through the metallic hydrides from the inlet towards the outlet end of the pipeline, and withdrawing the hydrogen gas from the pipeline outlet end. (See the Abstract.) Thomas teaches at col. 4, lines 55-57 that underground storage caverns can be filled or partially filled with metallic hydrides to store hydrogen with connection in various ways to the pipeline. However Thomas does not teach, disclose or suggest the

Application/Control Number: 10/812,084

Art Unit: 1754

particular sequence of steps as recited in applicants' claims, in particular the step of purifying the hydrogen stream after the compression step and after recovery of the hydrogen stream from the cavern. Nor would there be any motivation from the prior art to modify the process of Thomas to arrive at the particular sequence of steps as recited in applicants' claims. Applicants' specification discloses in Paragragh [0008] on page 3 that it has been found by the inventors herein that storage of hydrogen within salt formation produces unacceptably high levels of carbon dioxide and potentially other impurities in the hydrogen, which is not recognized by Thomas. Accordingly there would be no motivation to modify the process of Thomas by purifying the hydrogen stream after its removal from the cavern, as opposed to before its entry therein.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/812,084 Page 4

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Wayne Langel

Primary Examiner Art Unit 1754